

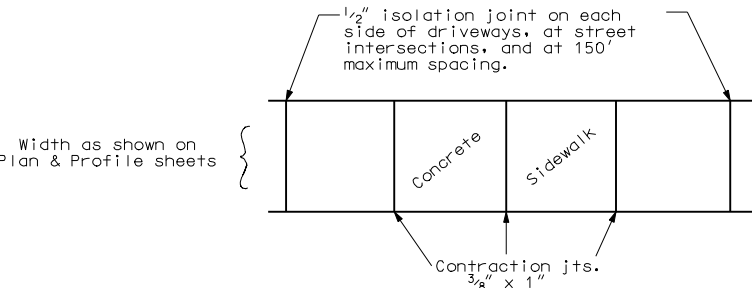
SIDEWALK & CURB RAMPS

- Notes:
1. The exact location & type of ramp shall be determined by the engineer in the field after consultation with the City Engineer & changes made accordingly.
 2. Method of payment: The curb ramp will not be paid for separately, but shall be included in the quantities & paid for at the unit price for concrete sidewalk and curb & gutter.
 3. The cost for all labor, equipment, and material (pre-molded expansion material & hot bituminous joint filler) necessary to construct contraction and isolation joints shall be included in the price bid for sidewalk.
 4. 4" base material shall be placed under the concrete sidewalk. All labor and materials necessary to place the base material shall be included in the price bid for Salvage Base Course or Aggregate Base Course CL 5.

(B) ADA required Detectable Warning area shall be 2' in direction of travel and shall extend the full width of the curb ramp.

Type II Curb:

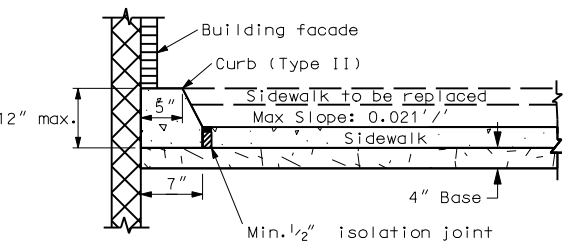
As shown on the plans or at the direction of the engineer, a curb shall be constructed where the existing sidewalk, abutting a building or adjacent property, is to be lowered. The curb will be paid for at the unit price bid for curb (Type-1) per lineal foot.



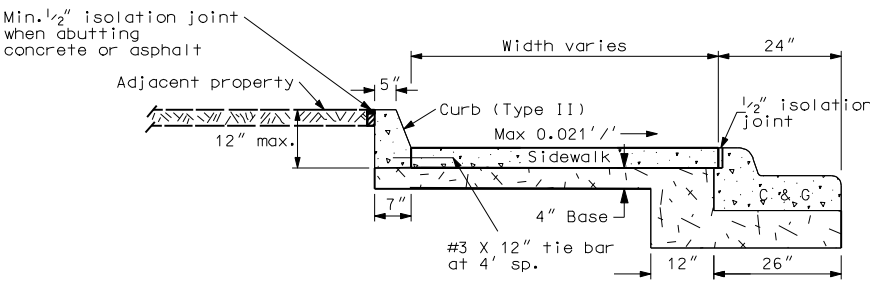
Sidewalk Width	Average Contraction Joint Spacing
4'-6"	5'
Over 6'	6'

CONCRETE SIDEWALK DETAILS

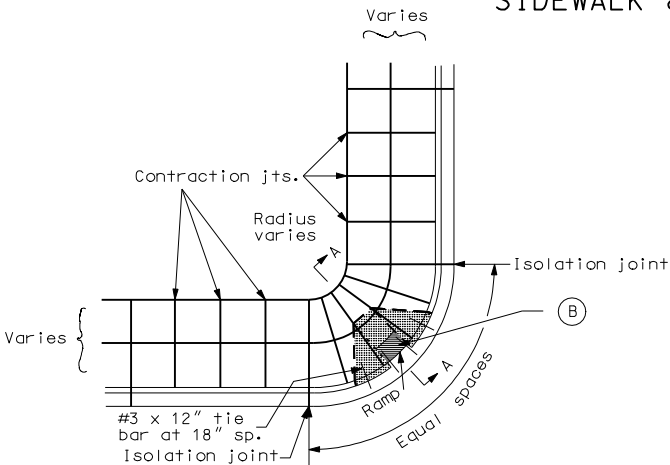
When the sidewalk is adjacent to the curb & gutter the sidewalk joint spacing shall be varied so that the sidewalk joints match up with the curb & gutter joints.



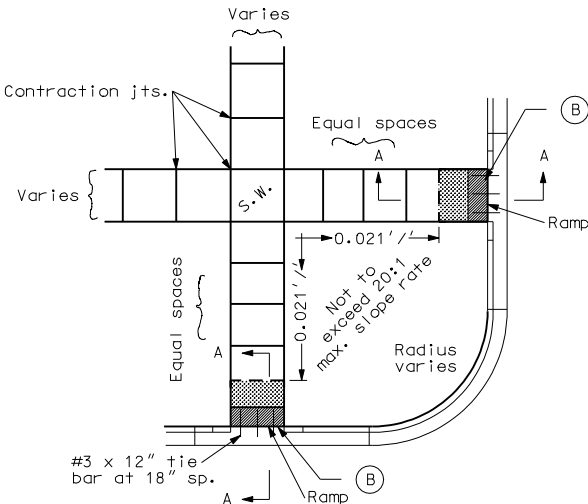
TYPE II CURB DETAIL



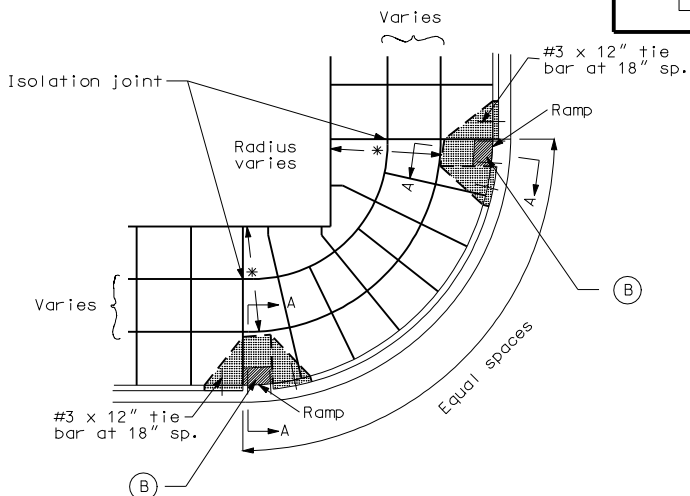
CURB DETAIL



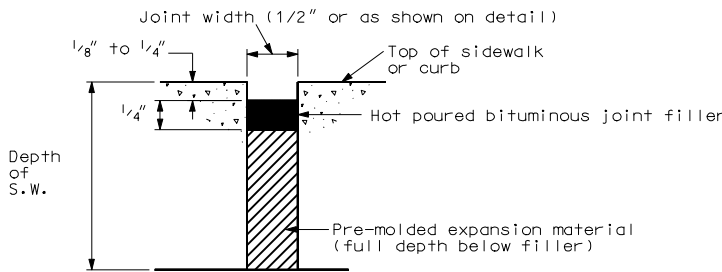
TYPE A



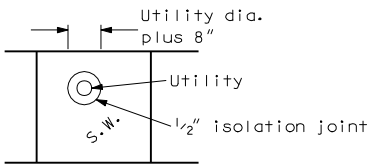
TYPE B



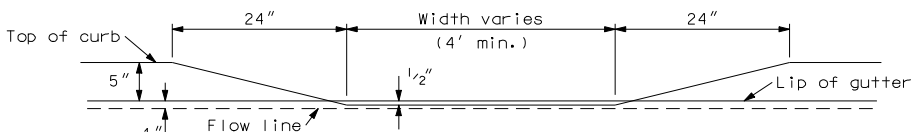
TYPE C



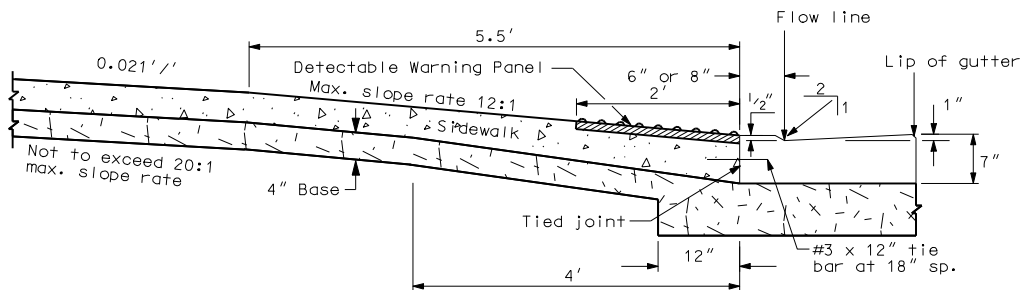
TYPICAL ISOLATION JOINT SEAL (longitudinal and transverse)



UTILITY BLOCKOUT

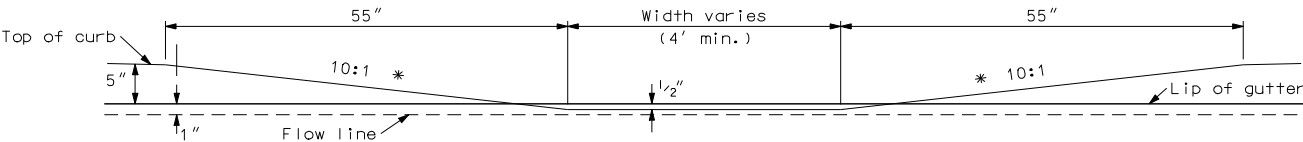


DEPRESSED CURB FOR PEDESTRIAN CROSSING (TYPE B RAMP)



SECTION A-A

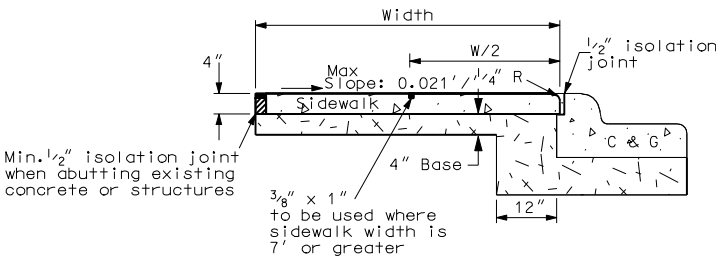
Ramps shall have a textured nonskid surface



DEPRESSED CURB FOR PEDESTRIAN CROSSING (TYPE A & C RAMPS)

* If less than 4' use 12:1 side slope

Side view



NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
10-1-86	
REVISIONS	
DATE	CHANGE
09-01-92	Remove Detectable Warning
09-23-92	Revised Expansion Joint
12-05-93	Isolation Joint
02-16-94	General Revisions
07-18-01	Revised Joints
03-11-02	Revised Section A-A
10-23-03	Added detectable warning
01-15-04	Added Maximum Slopes
01-24-04	Rev notes - Added base
12-01-04	PE Stamp added

This document was originally issued and sealed by MARK GAYDOS, Registration Number PE-4518, on 12/01/04 and the original document is stored at the North Dakota Department of Transportation